

## **SECTION 01 00 10 CONTRACTOR QUALITY CONTROL (CQC)**

### **PART 1 - GENERAL**

**1.1 REFERENCES:** VA Master Specs, subject RFP, and any resultant Contract.

**1.2 PAYMENT:** Separate payment will not be made for providing and maintaining an effective Contractor Quality Control (CQC) Program. All costs are included in the contract price.

### **PART 2 - DELIVERABLES**

**2.1 Contractor Quality Control (CQC) Plan,** to include VA and Project specific Safety and Infection Control Requirements.

### **PART 3 EXECUTION**

#### **3.1 GENERAL REQUIREMENTS**

A. The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clauses, Terms, Conditions, Drawings, Technical Specification Sections, and this particular Technical Specification Section. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence.

B. The Site Project Superintendent (SPS) will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The Site Project Superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The Site Project Superintendent (SPS) shall maintain a physical presence at the site, at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

**3.2 CONTRACTOR QUALITY CONTROL MANAGER (CQCM) TRAINING REQUIREMENTS:** Before project construction begins, the Contractor's Quality Control Manager is required to have completed any training or attendance as required by this RFP and any resultant contract.

**3.3 CONTRACTOR QUALITY CONTROL (CQC) PLAN:** The Contractor shall furnish a CQC Plan for review and approval by the Contracting Officer and the Contracting Officer Representative. The plan shall be submitted electronically simultaneously both to the Contracting Officer (CO) and to the Contracting Officer's Representative (COR). The plan shall identify personnel, procedures, control, instructions, records, and forms to be used in accordance with terms, conditions, technical drawings, and technical specifications.

**3.3.1 CONTENT OF CQC PLAN:** The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and off-site, including work by subcontractors, fabricators, suppliers and purchasing agents:

A. Description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the home office Project Manager (PM). One person may serve both roles. If so, that person shall report directly to Owner/CEO of the Prime Contractor. All of them shall coordinate continuously with SPS to ensure project is completed on time and within budget.

B. The name, qualifications, duties, responsibilities, and authorities of each person assigned a CQC function.

C. Copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Contracting Officer.

D. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, consultants, and purchasing agents. These procedures shall be in accordance with terms, clauses, conditions, drawings, and technical specifications of any resultant contract.

E. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test.

F. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

G. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

H. Procedures for reporting construction quality deficiencies. The plan will include proposed reporting formats.

I. List of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section.

### 3.3.2 ACCEPTANCE OF CQC PLAN

A. Acceptance of the Contractor's Quality Plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction.

B. The Government reserves the right to require the Contractor to make changes in the CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

### 3.3.4 NOTIFICATION OF CHANGES

A. Notification of Changes. After acceptance of the CQC plan, the Contractor shall notify the Contracting Officer in writing a minimum of fourteen (14) calendar days prior to any proposed change, including personnel.

B. Proposed changes, including personnel, are subject to review and approval by the Contracting Officer.

### 3.3.5 PRE-CONSTRUCTION MEETING

A. The CQC Plan shall be submitted for review a minimum of 10 calendar days prior to the Pre-Construction Meeting. It shall be submitted both to the CO and to the COR electronically simultaneously.

B. During the Pre-construction meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both on-site and off-site work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Contracting Officer and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file.

C. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures, which may require corrective action by the Contractor. Minutes of these meetings will be the responsibility of the Contractor, and will become a part of the contract file.

D. Notice To Proceed (NTP) shall not be issued until plan is approved by CO.

## 3.4 QUALITY CONTROL ORGANIZATION

### 3.4.1 Personnel Requirements

A. The requirements for the CQC organization are a CQC System Manager, and sufficient number of additional qualified personnel to ensure quality, safety, and contract compliance. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer.

B. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

### 3.4.2 CQC System Manager

A. This individual is subject to the review and approval of the Contracting Officer.

B. The Contractor shall identify an individual within his organization at the site of the work who shall be responsible for overall management of the CQC and have the authority to act

in all CQC matters for the Contractor.

C. The CQC system manager shall be a graduate engineer, graduate architect, or a graduate construction manager, with experience on construction projects similar in size, scope, and complexity to this contract, OR, a construction person with a minimum of three (03) years quality control experience on construction projects similar in size, scope, and complexity to this contract.

D. The CQC System Manager shall be on the site to the extent necessary as determined by the Contracting Officer during construction and shall be employed by the Contractor. The CQC System Manager may also serve as home office Project Manager. An alternate for the CQC System Manager will be identified in the plan to serve in the event of the CQC system manager's absence. The requirements for the alternate will be the same as for the designated CQC manager.

3.4.3 Organizational Changes: The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the COR for recommendations and to the Contracting Officer for final review and approval.

3.5 SUBMITTALS AND DELIVERABLES: Submittals shall be made as specified in Section 013323 Shop Drawings, Product Data, and Samples. The CQC organizational elements shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL: Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of the construction work. The three phases are the Preparatory Phase, the Initial Phase, and the Follow-Up Phase.

#### 3.6.1 Preparatory Phase

A. This phase shall be performed prior to beginning work on each definable feature of work. After all required documents and materials are reviewed, approved, and accepted by the Contracting Officer, and after copies are at the work site, work may begin on that feature of work. This phase shall include:

- 1) Review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards, in the English language unless specifically approved otherwise by the Contracting Officer, applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- 2) Review of the contract drawings.
- 3) Review all materials and/or equipment to ensure that they have been tested, submitted, and approved.
- 4) Review to ensure that provisions have been made to provide required control inspection and testing.
- 5) Examination of the work area to assure that all required preliminary work has

been completed and is in compliance with the contract.

6) Physical examination of required materials, equipment, and sample work to verify that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

7) Reviews of the appropriate activity hazard analysis to ensure safety requirements are met.

8) Discussion of procedures for constructing the work including repetitive deficiencies, construction tolerances and workmanship standards for that feature of work.

9) Review to ensure that the Contracting Officer has accepted the portion of the plan for the work to be performed.

10) Discussion of the initial control phase.

B. The Contracting Officer's Representative shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager, PM, SPS, and other CQC personnel as applicable for the definable feature.

C. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

### 3.6.2 Initial Phase.

A. This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

1) Review of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.

2) Verification of full contract compliance and verification of required control inspection and testing requirements.

3) Establishment of level of workmanship. Verification that the work completed meets minimum acceptable workmanship standards. Compare with sample panels as appropriate.

4) Resolution of all differences.

5) Review of safety to include; compliance with and upgrading of the safety plan as necessary, and an activity hazard analysis. Review the activity analysis with each worker.

B. The Contracting Officer's Representative shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

C. Initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase: Daily checks shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted, and all noted deficiencies corrected, prior to the start of additional features of work that may be affected by the deficient work. The Contractor shall not build upon

nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases: Additional preparatory and initial phases may be required by the Contracting Officer on the same definable features of work if the quality of on-going work is unacceptable; if there are changes in the applicable QC staff or in the on-site production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

### 3.7 TESTS

#### 3.7.1 Testing Procedure

A. The Contractor shall perform all tests specified or required to verify that control measures are adequate to provide a product that conforms to contract requirements. Upon request, the Contractor shall furnish to the Contracting Officer duplicate samples of test specimens for possible testing by the Government. Costs incidental to the transportation of samples or materials shall be borne by the Contractor.

B. Testing includes operational and/or acceptance tests when specified. A list of tests to be performed shall be furnished as a part of the CQC plan. The list shall give the test name, frequency, specification paragraph containing the test requirements, the personnel and laboratory responsible for each type of test, and an estimate of the number of tests required. The Contractor shall perform the following activities, and provide a record of the following data:

- 1) Verification that testing procedures comply with contract requirements.
- 2) Verification that facilities and testing equipment are available and comply with testing standards.
- 3) Verification that test instrument calibration data meet certified standards.
- 4) Verification that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- 5) Results of all tests taken, both passing and failing tests, shall be recorded on the Quality Control report for the date taken. Specification paragraph/item reference, location where tests were taken, and the sequential control number identifying the test will be given.
- 6) Actual test reports may be submitted later, if approved by the Contracting Officer, with a reference to the test number and date taken. An information copy of tests performed by an off-site or commercial test facility will be provided directly to the COR.
- 7) Failure to submit timely test reports, as stated, may result in nonpayment for related work performed and disapproval of the test facility for this contract.

### 3.8 COMPLETION INSPECTION

#### 3.8.1 Punch-Out Inspection

A. Near the end of the work, or any increment of the work established by a time stated in the SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION.

B. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the COR that the facility is ready for the Government's Pre-Final inspection.

### 3.8.2 Pre-Final Inspection

A. The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner.

B. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

### 3.8.3 Final Acceptance Inspection

A. The Contractor's Quality Control Manager, the SPS, and the COR shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those Medical and Engineer leadership and customer groups, may also be in attendance.

B. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least fourteen (14) calendar days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection.

C. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

## 3.9 DOCUMENTATION

A. The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- 1) Contractor/subcontractor and their area of responsibility.
- 2) Operating plant/equipment with hours worked, idle, or down for repair.
- 3) Work performed each day, giving location, description, and by whom.
- 4) Test and/or control activities performed with results and references to specifications / drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

- 5) Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- 6) Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- 7) Offsite surveillance activities, if any, including actions taken.
- 8) Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- 9) Instructions given/received and conflicts in plans and/or specifications.
- 10) Contractor's verification statement.

B. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract.

C. The original and one copy of these records in report form shall be furnished to the Government daily within forty-eight (48) hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed, or unless weekly submission was established during the Pre-construction meeting.

D. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract.

E. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS: In accordance with VA Master Specs, subject RFP, and any resultant Contract.

### 3.11 NOTIFICATION OF NON-COMPLIANCE

A. The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements.

B. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

C. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue a suspension of work (See RFP / Contract Clause FAR 52.242-14 -- Suspension of Work (Apr 1984)) halting all or part of the work until satisfactory corrective action has been taken by the Contractor and completed by the Contractor to the complete satisfaction of the Government.

D. No part of the time lost due to such suspension of work shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --